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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KIM, TAE K

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,854	Applicant(s) GERVAIS ET AL.	
	Examiner TAE K. KIM	Art Unit 2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,11-14,16-18 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,11-14,16-18 and 21-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is in response to the Applicant's response filed on March 4, 2009. Claim 1 has been amended by the Applicant. Claim 32 has been added by the Applicant. Claims 1, 2, 4, 11 - 14, 16 - 18, and 21 - 32, where Claims 1 and 16 are in independent form, are presented for examination.

Response to Arguments

Applicant's arguments filed on March 4, 2009 have been fully considered but they are not persuasive. Applicant argued:

- a) Regarding Claims 1 and 16, the specification supports the limitations as claimed and, therefore, the 35 U.S.C. 112, first paragraph rejection is improper.
- b) Regarding Claims 1 and 16, O'Brien, in view of Smith, either taken singly or in combination, fails to teach or suggest "comparing, at the bi-directional communication device, a particular one compatibility parameter of said ALG file with both a compatibility feature of said bi-directional communications device and a non-signature, non-code-error checking feature expected in received and authentic ALG files by said bi-directional communication device."
- c) Regarding Claims 2, 4, 9, 11 – 14, and 21, the dependent claims are patentably distinct and non-obvious over the cited references for at least the reasons sent for above with respect to independent Claim 1.

- d) Regarding Claims 17 and 18, the dependent claims are patentably distinct and non-obvious over the cited references for at least the reasons sent for above with respect to independent Claim 16.
- e) Regarding Claims 11 and 18, the Applicant has seasonably challenged the Official Notice stated in the Non-Final Office Action mailed on August 29, 2007.

Examiner respectfully disagrees with applicant's assertions.

1. With regards to a), the Applicant relies on MPEP 2163 to state that the header or body size field may be compared to a non-signature non-code-error checking feature of an ALG file having such a field or value for the field as would be expected in received and authentication ALG files (See Applicant's Remarks Pg. 8-9). The Applicant further states that the header or body size field may be compared to the non-signature, non-code-error checking feature of an ALG file having a header or body size field with a particular value or within a range of values to determine whether the specified size, for example, exceeds size thresholds for expected ALG files that are received relying upon MPEP 2163 [See Applicant's Remarks Pg. 8-9].

Foremost, MPEP 2163 does not state that a particular function or property that is known within the art is enough to establish inherency. On the contrary, the MPEP states, "[t]o establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result

Art Unit: 2453

from a given set of circumstances is not sufficient.” In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). [See MPEP 2163.07(a)].

The Applicant suggests that a particular step or property (performing a second comparison) is necessarily present within the invention described simply because of the mere fact that the prior art cited mentions the steps of comparing the size of the header or body of the file to determine if they are longer than they should be to prevent the downloading of viruses [See Smith, Para. 0065-0066].

The disclosure of the present application does not even suggest that the header or body size is compared to determine if there is anything unusual with the file itself. The present application discloses of comparing the header and/or body size of the incoming file only to determine if the ALG file fits within the non-volatile memory of the bi-directional device [See Fig. 3, item 312; Para. 0051 of present application]. There is no evidence or suggestion within the specification of comparing the header and/or body size of the incoming file to determine if a virus is present within the file. The disclosure merely suggests that the size comparison is made to determine if the file fits within the non-volatile memory of the bi-directional device. There is nothing to suggest the inherency of any features of the Smith reference.

Additionally, there is nothing within the disclosure of the present application that will suggest to a person of ordinary skill in the art that ***only one compatibility parameter is compared to a compatibility feature of the bi-directional communications device and a non-signature, non-code-error checking feature expected in received and authentic ALG files*** as stated in the claims. The Applicant relies upon MPEP 2163 to suggest that the second comparison of the lone compatibility

parameter is an inherent step of the invention. As stated above, there is nothing to suggest that it is inherent to compare the header or body size of the file to determine if there is anything unusual, such as an attached virus, with the file itself.

Furthermore, the disclosure of the present application does not disclose of two separate comparisons of either the header or body size. The specification states that the ALG size (header or body size) is compared **only once** [Fig. 3, step 312] to determine if the ALG file fits within the non-volatile memory of the device (compatibility feature of the bi-directional device) [Fig. 3; Para. 0051]. It is clear from the disclosure that there are comparisons made between several compatibility parameters and several compatibility features [Fig. 3; Para. 0046], but the disclosure does not state that the one compatibility parameter is compared to a compatibility feature of the bi-directional communications device **and** a non-signature, non-code-error checking feature expected in received and authentic ALG files.

Finally, the specification states that the header size field and the body size fields vary in length [See Pg. 11, Lines 2 – 20].

The Examiner maintains the 35 U.S.C. 112, first paragraph rejection to Claims 1 and 16.

2. With regards to b), the examiner points out that the pending claims must be "given the broadest reasonable interpretation consistent with the specification" [In re Prater, 162 USPQ 541 (CCPA 1969)] and "consistent with the interpretation that those skilled in the art would reach" [In re Cortright, 49 USPQ2d 1464 (Fed. Cir. 1999)]. The Examiner also refers to the 35 U.S.C. 112, first paragraph issues with Claims 1 and 16 above. Due to these deficiencies, "the broadest reasonable interpretation consistent

with the specification” that would allow Claims 1 and 16 to meet the written description requirement is to interpret “a particular one compatibility parameter of [the] ALG file” as the entire file itself.

As acknowledge by the Application O'Brien discloses of comparing a digital signature of the upgrade module to authenticate the server and to verify the integrity of the data [See Applicant's Remarks, Pg. 12, referencing O'Brien Col. 4 Lines 56-64 and Col. 5, Lines 25-34]. Therefore, the upgrade module/file (single item) is compared to a compatibility feature of the bi-directional device (that the upgrade came from the correct server) by the upgrade agent within the bi-directional device. O'Brien further discloses that the deployed device that received the upgrade module/file can be another server or any other interconnect system [Col. 4, Lines 22-26].

Smith discloses of a method and system for providing protection from exploits to devices connected to a network by comparing the received file with a non-signature, non-code-error checking feature expected in received and authentic files [Para. 0065 and 0066; the size of the header or body of the file is examined to determine if they are longer than they should be]. Smith further discloses that this method and system is performed by a bi-directional device [See Fig. 5; item 500; a firewall].

Since a firewall and a server have the same essential elements to process software (i.e. processor, I/O device(s), memory, etc.), it would have been obvious to one skilled in the art to incorporate the examining of a file header to determine if the header or body size of the file is larger than they should be to prevent the possible download of a virus by incorporating the appropriate software within the computing device.

Additionally, Claim 1 has been amended to further clarify inconsistencies within the claim language. Therefore, in light of the admission by the Applicant as what is taught by O'Brien and the broadest reasonable interpretation consistent with the specification, the Examiner maintains that the combination of O'Brien and Smith disclose all the limitations of Claims 1 and 16.

3. With regards to c) and d), the Applicant relies upon the arguments presented for Claims 1 and 16. Therefore, the Examiner refers to section 1 above regarding the arguments to Claims 1 and 16.

4. With regards to e), the Examiner has review the prior record has would like to show that the Applicant did not challenge the Official notice in the Remarks dated November 9, 2007 and on April 14, 2008. The Applicant, however, does challenge the limitation of a bi-directional device further comprising a cable modem.

Foremost, the Applicant argues there are inconsistencies to what is described as a bi-directional device. The Applicant argues that the O'Brien system limits a bi-directional device to only a server [See Applicant's Remarks Pg. 15-16]. However, the cited portion of O'Brien does not limit the device to only a server. As shown, the deployed device can be a cell phone, a monitor, a server, a system using a compact PCI, or any other interconnect system [See Fig. 1; Col. 4, Lines 23-26]. The interpretation of O'Brien does not limit the deployed device that will run the update agent as only to be a server.

Additionally, the upgrade agent is a small piece of software that operates on the deployed devices within the system [See Fig. 1; Col. 4, Line 50 – Col. 5, Line 15]. Therefore, the upgrade agent can be installed and operated on numerous computing

Art Unit: 2453

devices that comprise of a processor and memory with communication to the upgrade server. There are no inconsistencies to the Examiner's interpretation of a bi-directional device.

Given the Applicant's challenge, the Examiner cites U.S. Patent 6,665,752 ("Bernath") to show that having a cable modem as a bi-directional device would have been obvious to one skilled in the art at the time of the invention and described in detail further below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not contain subject matter describing the limitation of "comparing...a particular one compatibility parameter of said ALG file with both a compatibility feature of said bi-directional communication device and a non-signature, non-code-error checking feature expected in received and authentic ALG files."

Most notably, the specification states that after the compatibility feature of the communication device is compared to the particular one compatibility parameter of the ALG file, other parameters are checked for validity [See Fig. 3 of Specification; Items

Art Unit: 2453

312, 314, 316 - 340]. Additionally, the header size varies in its size and, therefore is not a feature expected in received and authenticated files. Furthermore, the header size is not compared to a non-signature, non-code-error checking feature expected in received and authentic ALG files [See Pg. 11, lines 3-6]. Additionally, see section 1 above.

6. Claim 32 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not contain subject matter describing the limitation of “the particular one compatibility parameter is both capable of being directly compared and indirectly compared to the compatibility feature of said bi-directional communication device, wherein an indirect comparison involves the particular one compatibility parameter being included in a sum, and wherein the sum is cable of being directly compared to the compatibility feature of said bi-directional communications device.

Most notably, the cited portions of the specification (Pg. 10, Lines 10-19 and Pg. 13, Lines 407) does not disclose of indirectly comparing the compatibility parameter to the compatibility feature of the bi-directional device. Again, the specification discloses of comparing the header and/or body file only once. See section 1 above.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 4, 12, 14, 16, 17, and 21 – 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,986,133 B2, invented by Michael D. O'Brien et al. (hereinafter "O'Brien"), in view of U.S. Appl. 2002/0152399, filed by Gregory J. Smith (hereinafter "Smith").

5. Regarding Claims 1, 4, 14, 16, and 27, O'Brien discloses a system and method of receiving, at a bi-directional communications device [Fig. 2; Col. 6, Lines 34-55; agent fetches the upgrade file from the server], an application level gateway (ALG) file [Fig. 1; Col. 4, Lines 22-25; bi-directional device can be another server or any other interconnect system, also called a gateway];

comparing, at the bi-directional communications device, a particular one compatibility parameter of said ALG file with a compatibility feature of said bi-directional communications device [Col. 4 Lines 56-64 and Col. 5, Lines 25-34; upgrade policy includes a digital signature that is compared by the upgrade agent to authenticate and verify the upgrade file]; and

storing said ALG file at said bi-directional communications device in response to a favorable comparison of said particular one compatibility parameter of said ALG file [Col. 4 Lines 56-64 and Col. 5, Lines 25-34; upgrade policy includes a digital signature that is compared by the upgrade agent to authenticate and verify the upgrade file prior to installation].

O'Brien does not specifically disclose that the particular one compatibility parameter of the file is also compared with a non-signature, non-code-error checking feature expected in received and authentic files.

Smith discloses of a method and system for providing protection from exploits to devices connected to a network by comparing the received file with a non-signature, non-code-error checking feature expected in received and authentic files [Para. 0065 and 0066; the size of the header or body of the file is examined to determine if they are longer then they should be]. It would have been obvious to one skilled in the art at the time of the invention to verify the header or body length of a particular message to ensure that there is no executable code within the overflow buffers allotted for portions or all of a header or body of a file [Para. 0026]. This allows the system to prevent improper access to data or unauthorized programs executed on the host computer [Para. 0026].

6. Regarding Claims 2 and 17, O'Brien, in view of Smith, discloses all the limitations of Claims 1 and 16 above. O'Brien further discloses of rejecting the ALG file at the communications device in response to an unfavorable comparison of said particular one compatibility parameter [Col. 4 Lines 56-64 and Col. 5, Lines 25-34; upgrade policy includes a digital signature that is compared by the upgrade agent to authenticate and verify the upgrade file].

Applicant has failed to seasonably challenge the Examiner's assertions of well known subject matter in the previous Office action(s) pursuant to the requirements set forth under MPEP §2144.03. A "seasonable challenge" is an explicit demand for evidence set forth by Applicant in the next response. Accordingly, the claim limitations the Examiner considered as "well known" in the first Office action, i.e. cable modem is a bi-directional communication device, are now established as admitted prior art of record

Art Unit: 2453

for the course of the prosecution. See *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943).

7. Regarding Claim 12, O'Brien, in view of Smith, discloses all the limitations of Claim 1 above. O'Brien further discloses that the system periodically polls a service provider to determine if at least one of a new and updated ALG file is available, then sends a request for an available ALG file and receives said requested ALG file from an access network [Col. 4, Lines 28-30, 56-59; agent polls the server for updates and, if an update is available, fetches and applies the update to the device].

8. Regarding Claims 21 – 23, 26, 28, 29, O'Brien, in view of Smith, discloses all the limitations of Claims 1, 4, 16, and 27 above. O'Brien further discloses that at least one compatibility_feature of said bi-directional communications device comprises an amount of available memory in said bi-directional communications device to store the ALG file [Fig. 2; Col. 7, Lines 15-21; upgrade agent in the firewall fetches all chunks of the upgrade file and rebuilds the file before the agent performs a security check; Col. 10, Line 33 - Col. 11, Line 59; the InMemCapacity parameter requires that the bi-directional device has at least this amount of memory available to fetch all chunks of the upgrade and to rebuild the file].

9. Regarding Claims 24, 25, 30, and 31, O'Brien, in view of Smith, discloses all the limitations of Claims 1 and 16 above. O'Brien further discloses that a value of the particular one compatibility parameter of said ALG file is added to a value of another particular one compatibility parameter of said ALG file as a sum that is compared to a value of the compatibility feature of said bi-directional communications device [Col. 7,

Lines 15-18; the upgrade agent performs a comparison for each chunk of the upgrade with the appropriate checksum to determine if the file is corrupt].

Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien, in view of Smith, and further in view of U.S. Patent 6,665,752, invented by Brett A. Bernath (hereinafter referenced as "Bernath").

10. Regarding Claims 11 and 18, O'Brien, in view of Smith, discloses all the limitations of Claims 1 and 16 above. O'Brien discloses several types of bi-directional devices that can implement the disclosed system and method [Fig. 1; Col. 4, Lines 23-26; devices can be a monitor, printer, copier, cell phone, PDA, server, etc.]. Neither O'Brien nor Smith, however, specifically disclose that the bi-directional communication device is a cable modem.

Bernath discloses a system and method of updating a cable modem specification through a network [Fig. 5A; Col. 10, Lines 10 – 47]. Bernath further discloses the cable modem comprises of a processor, memory and connected to a network [Col. 2, Line 47 - Col. 3, Line 16].

It would have been obvious to one skilled in the art at the time of the invention to incorporate the teachings of Bernath to they system in O'Brien since a cable modem is capable of downloading files to itself and storing those files within its own memory. The motivation to do so is to allow additional computing devices to be upgraded using the upgrade agent.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien, in view of Smith, and further in view of U.S. Patent 6,031,830, invented by Paul A. Cowen (hereinafter referenced as "Cowen").

11. Regarding Claim 13, O'Brien, in view of Smith, discloses all the limitations of Claim 1 as stated above. O'Brien or Smith, however, do not specifically disclose that the request to download the files occurs after a configuration file is identifying at least one new or updated ALG file is received and first compared by the device.

Cowan discloses a system and method of downloading new or updated files where the device receives a configuration file from said service provider, which identifies at least one new or updated ALG files, then the devices sends a request for those files, and receives the requested files from an access network (Figs. 7(a) – (h); Col. 10, Lines 27 – Col. 11, Line 54; terminal requests query to host/server, which in turn sends a package definition packet identifying the file; terminal then compares versions and if they are different, terminal transmits the file request packet and the host/server begins transmitting file data). It would be obvious to one skilled in the art at the time of the invention to verify that the files are new or updated before downloading them into the terminal. Not only will that save resources that would have been used if the files are downloaded and then verified, but it also prevents the terminal from accidentally deleting the prior version of the files prior to completing the download of the new or updated files.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 2453

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Examiner's Note: Examiner has cited particular figures, columns, line numbers, and/or paragraphs in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae K. Kim, whose telephone number is (571) 270-1979. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne, can be reached on (571) 272-4001. The fax phone number for

Art Unit: 2453

submitting all Official communications is (703) 872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the examiner at (571) 270-2979.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Tae K. Kim/
Examiner, Art Unit 2453

June 5, 2009

/ARIO ETIENNE/
Supervisory Patent Examiner, Art Unit 2457